WILKINSON, BARKER, KNAUER & QUINN

LAW OFFICES
1735 NEW YORK AVENUE, N. W.
WASHINGTON, D. C. 20006-5289
(202) 783-4141

TELECOPIER
(202) 783-5851
(202) 833-2360

GERMAN OFFICE
GOETHESTRASSE 23
60313 FRANKFURT, GERMANY
011-49-69-20876
011-49-69-297-8453 (TELECOPIER)

August 19, 1994

RECEIVED
AUG 19 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

EX PARTE

BY HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: PR Docket No. 93-61 - Automatic Vehicle Monitoring Systems

Dear Mr. Caton:

On behalf of CellNet Data Systems, Inc. and KNOGO Corporation, enclosed please find a letter to Ralph Haller, Chief, Private Radio Bureau, regarding the above-referenced proceeding. The letter is being delivered to Mr. Haller concurrently with the instant filing. Please associate the letter with the materials in the above-referenced proceeding.

Two copies of the instant filing are being submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Should you have any questions regarding this letter, please contact the undersigned.

Sincerely,

WILKINSON, BARKER, KNAUER & QUINN

Lawrence J. Movshin

By: Lawrence J. Movshin

Enclosures

cc: Ralph Haller (w/ original enclosure)

WILKINSON, BARKER, KNAUER & QUINN

LAW OFFICES
1735 NEW YORK AVENUE, N. W.
WASHINGTON, D. C. 20006-5289
(202) 783-4141

TELECOPIER
(202) 783-5851
(202) 833-2360

GERMAN OFFICE
GOETHESTRASSE 23
60313 FRANKFURT, GERMANY
011-49-69-20876
011-49-69-297-8453 (TELECOPIER)

August 19, 1994

EX PARTE - TWO COPIES FILED
IN SECRETARY'S OFFICE

BY MESSENGER

Mr. Ralph Haller
Chief, Private Radio Bureau
Federal Communications Commission
2025 M Street, N.W.
Room 5002
Washington, D.C. 20054

Re: PR Docket 93-61 - Modifications to the Regulations for Automatic Vehicle Monitoring Systems

Dear Mr. Haller:

On behalf of CellNet Data Systems, Inc. ("CellNet") and KNOGO Corporation ("KNOGO"), both manufacturers of Part 15 devices, I am writing to express these companies' strong objection to the course that the above-referenced proceeding continues to take. CellNet and KNOGO also want to add their voices to those other Part 15 manufacturers who have commented unfavorably on various proposals that have been advanced recently by the proponents of expanding AVM and LMS uses of the 902-928 MHz band. While CellNet and KNOGO applaud the efforts to strike a balance between AVM, LMS and Part 15 uses, it is respectfully submitted that the currently advanced "compromise" proposal (1) cannot, and should not, be adopted without further notice and an opportunity for all interested parties to provide comment, and (2) does not achieve its nominal objective of enabling Part 15 devices to survive, much less co-exist, in the band.

CellNet and KNOGO filed comments on the proposal in the Notice of Proposed Rulemaking ("NPRM") in this proceeding. They strongly opposed the significant liberalization of the existing "interim" rules that would have expanded licensed operation in

the 902-928 MHz band to include LMS operations. The record developed in response to that NPRM was overwhelmingly in opposition to the proposed rules. As opponents urged, the proposed rules would virtually deny any expansion within the band by Part 15 manufacturers, and create an environment of regular incidents of interference to the licensed AVM and LMS systems.

Since that time, the AVM industry has regularly made ex parte presentations to demonstrate that it can co-exist with Part 15 users. More importantly, when faced with empirical evidence of anticipated harmful interference, the AVM industry has propounded new "compromise" proposals that are substantively different than the regulatory scheme set forth in the NPRM. CellNet and KNOGO have joined other Part 15 manufacturers in several written presentations to the Staff intended to rebut some of the AVM presentations. In sum, this "public notice and comment" rulemaking has degenerated into an ex parte "private presentation" rulemaking process.

For example, we have recently been advised that a new proposal is being "floated" for comment by those close to this proceeding. Under this new "compromise," the 902-904 MHz, 910-920 MHz and 926-928 MHz bands would be available for non-multilateration LMS systems (such as local area "tag reader" systems). The 904-910 MHz and 920-926 MHz bands would be available "exclusively" for multilateration systems, meaning that non-multilateration systems would not be allowed in these bands. In the 910-920 MHz band, multilateration systems would be allowed on a secondary basis only, and they would have no hierarchical superiority over Part 15 devices. Part 15 devices would operate throughout the entire 902-928 MHz band on a secondary basis, as they do today. However, a Part 15 device operating in the exclusive "multilateration" bands could not be considered a source of harmful interference unless:

1. The Part 15 device is an outdoor device with an antenna more than five meters above the ground; or

2. It uses spread spectrum under Section 15.247 and radiates more than 6 dBW effective isotropic radiated power; or

3. It is a field disturbance sensor operating under Section 15.245.

If a Part 15 device meeting one or more of these criteria is causing interference to a multilateration system operating in either the 904-910 or 920-926 MHz bands, the Part 15 operator must work to resolve the interference in accordance with its secondary status.

There are many reasons why this proposal, like several propounded by the AVM industry, will not satisfy the concerns of Part 15 device manufacturers. But as a fundamental matter, CellNet and KNOGO submit that further notice and comment rulemaking proceedings are necessary before this proposal, or any other proposal similarly so far removed from the original concept set forth in the NPRM, can be adopted. Section 553 of the Administrative Procedure Act requires that a notice of proposed rulemaking be published in the Federal Register and interested parties be given an opportunity to comment when substantive new rules or modifications to existing rules are proposed. This new proposed band plan includes rules so substantively different from those which were initially proposed, significantly impacting operations in existing services, that the proposal cannot be adopted by the Commission without further notice and comment pursuant to the Administration Procedure Act. CellNet and KNOGO urge the Commission to grant all interested parties, and not just those fortunate enough to have access to the various ex parte filings that characterize the course of this proceeding, the opportunity for full hearing on these significant technical issues.

Moreover, as a substantive matter, the proposal is incomplete and would not enable Part 15 operations to survive in the band.[1/] The proposal will not serve as a compromise - its intended purpose - unless it deals with harmful interference to Part 15 devices from LMS, as well as harmful interference to LMS from Part 15 devices. Otherwise, Part 15 devices will, in very short order, be forced out of this band by reason of their secondary status and the likelihood that interference from LMS systems will make the band unusable.

Indeed, the guidelines suggested in this new proposal will present the Commission with insurmountable administrative

---

1/ For example, there should be no above ground height restrictions (thresholds) on Part 15 outdoor antennas, as such restrictions are meaningless. An antenna that is only five meters above the ground at a height of 1,000 feet above average terrain would have much greater potential to cause an interfering signal than an antenna 15 meters above the ground and zero feet above average terrain. Similarly, the signal from "indoor" antennas located several stories above ground, such as in a parking garage or inside a building next to a window, would have the potential to cause more interference than an outdoor antenna located 10 meters above the ground. Any outdoor antenna height limitation could have a significant impact on many Part 15 services.

and enforcement burdens. The Commission will have to identify the signal causing alleged harmful interference to LMS operations when there are thousands of Part 15 devices operating in a particular area. Ironically, in that case, it is likely to be the Part 15 user with the most noticeable signal, not necessarily the one with the interfering signal, that will be faced with the costs of addressing the interference, even if it has no part in creating the problem.

It should be noted that several other alternative proposals have been placed before the Commission that would improve the potential for both Part 15 and LMS services to co-exist in the 902-928 MHz band.[2/] However, given the disparities between the initial proposals in the NPRM and any of the "compromises" that now dominate the discussion of these issues,

---

2/ For a proposal to be acceptable to both communities of manufacturers and users, CellNet and KNOGO submit that it must include certain technical parameters relating to LMS operations. For example, no wideband LMS forward links should be permitted, since they will likely cause harmful interference to all users in the particular frequency band. This prohibition should not impact LMS multilateration systems because the forward link is essentially a paging channel, and does not play a part in the actual location function.

Also, narrowband (no more than 25 kHz) LMS forward links should be allowed only in the 927.5 and 928 MHz bands. Locating the forward links at the edge of the band would make it easier to avoid them, and would not unduly restrict other band users' operations because there are already paging signals at 929 MHz. Operation of forward links in this manner would permit LMS multilateration systems to operate with the full protection of Section 15.5 of the Rules. In addition to the forward link provisions, power limits and duty cycle limits for the LMS reverse (mobile) links are necessary. Because the reverse links are wide band transmissions, some limits are necessary so that they do not eliminate the possibility of Part 15 devices being able to share the band.

the Commission should not adopt any regulations without further notice and comment.

Yours very sincerely,

Lawrence J. Movshin

Lawrence J. Movshin

cc: Chairman Hundt
Commissioner Quello
Commissioner Barrett
Commissioner Ness
Commissioner Chong
Richard Engelman
Rosalind K. Allen
Thomas P. Stanley
Bruce A. Franca
Richard M. Smith
Michael J. Marcus